



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/723,264

11/26/2003

Stephen E. Gray

36287-04404

8757

27171

7590

01/23/2009

MILBANK, TWEED, HADLEY & MCCLOY
1 CHASE MANHATTAN PLAZA
NEW YORK, NY 10005-1413

EXAMINER

TROTTER, SCOTT S

ART UNIT

PAPER NUMBER

3694

MAIL DATE

DELIVERY MODE

01/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/723,264	Applicant(s) GRAY ET AL.	
	Examiner SCOTT S. TROTTER	Art Unit 3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 18, 19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18, 19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>September 22, 2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Office acknowledges the receipt of Applicant's amendment on October 3, 2008. This rejection is made **FINAL**. Claims 1-16, 18, 19, and 21-23 are pending and examined. Claims 17 and 20 are cancelled.

Information Disclosure Statement

2. An initialed and dated copy of Applicant's IDS form 1449 filed September 22, 2008, is attached to the instant Office action.

Response to Arguments

3. Arguments related to art are moot due to new grounds of rejection necessitated by the amendment.

4. The 112 2nd rejection has been withdrawn.

5. The 101 rejection has been amended to address the applicant's amendment. Unless the Supreme Court or other cases change it the state of the law does not appear favorable to this application.

6. Since Applicant(s) did not seasonably traverse the Official Notice statement(s) as stated in the previous Office Action (Dated June 12, 2008, Paragraph No. 11-13), the Official Notice statement(s) are taken to be admitted prior art. See MPEP §2144.03.

Claim Rejections - 35 USC § 101 Utility

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-16 and 23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876) and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. (The Supreme Court recognized that this test is not necessarily fixed or permanent and may evolve with technological advances. *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972)) If neither of these requirements is met by the claim, the method is not a patent eligible process under § 101 and should be rejected as being directed to nonstatutory subject matter. In this case there is neither a particular apparatus or a physical transformation. As for the computer system determining option prices that appears be simply **data gathering** which extra solution activity which does not make a process patent eligible under *Bilski* pages 26-27 {United States Court of Appeals for the Federal Circuit 2007-1130 (Serial No. 08/833,892) IN RE BERNARD L. BILSKI and RAND A. WARSAW} (If the citation is not in a proper form since the examiner used a pdf of how the opinion appeared on the Federal Circuits

Art Unit: 3694

website a search for the term "data gathering" in the Bilski opinion will find the relevant passage.)

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

10. Claims 1, 9, 15, 18, 19 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Sullivan et al. (U.S. Patent 7,337,141 B2 hereafter Sullivan).

As per claim 1 the trading of options is taught by Sullivan. (*see column 2 lines 46-62*) The listed variety can be traded at anytime that an exchange is open from issuance until expiration of the option. "American style" options can also be executed at any time up until expiration. As for decision periods an option can be transferred anytime after it is issued giving an infinite number of decision periods. The values offered for the options are the values offered by the market which are determined by what the buyers think the options are worth.

As per claim 9 the use a stock price at a predetermined period of time is a European style option that must be executed at one specific point in time. (*see Sullivan column 2 lines 46-49*)

As per claim 15 see the rationale for claim 1 as a parallel system claim to that method claim.

As per claim 18 see the rationale for claim 1 as a parallel computer readable medium claim to that method claim.

As per claim 19 see the rationale for claim 1 as a parallel system claim to that method claim.

As per claim 23 trades can take place between a wide variety of traders which would include individuals other than the employer. (*see Sullivan column 6 lines 13-26*)

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2-8, 10-14, 16, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan in view of Official Notice.

As per claims 2, 3, 4, 12, 13, and 14 Sullivan teaches the trading of stock options but does not explicitly address prorating trades Official Notice that partial executions are old and well known in the art of trading therefore it would have been obvious to a person

Art Unit: 3694

of ordinary skill in the art of trading options to only fill the part of the order that can be filled.

As per claim 5, 6, and 10 Sullivan teaches the method of claim 1 but does not explicitly teach using option pricing formulas to set option prices. But it is old and well known in the art of finance that option pricing formulas exist to show what an appropriate price would be for an option. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use option pricing models such as the Black-Scholes Model or the Binomial model (both of which were taught by Peter Hoadley's Option Strategy Analysis Tools disclosed in the January 9, 2004 IDS) to determine an appropriate price for an option.

As per claim 7 Sullivan teaches the method of claim 1 but does not explicitly teach using a pricing grid to provide a plurality of option value pricing. But it is old and well known in the art of presenting the results of mathematical equations to present them in a grid with a obvious example being logarithmic and trigonometric functions which were published in books rather than being recalculated by hand every time they were needed. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a pricing grid to convey the plurality of option value prices showing the results of the models in a convenient format.

As per claim 8 Sullivan teaches the method of claim 1 but does not explicitly teach determining an average stock trading price over a predetermined period of time. It is old and well known in the art of finance to track a **moving average** price of a security. Therefore it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to used a moving average of the stock to smooth out the volatility in the price swings over the time period.

As per claim 11 Sullivan teaches the method of claim 10 but don't explicitly teach electing transfer of an employee stock option during a particular decision period; and executing an order for transfer of the employee stock option after the particular decision period. But Official Notice is taken that it is old and well known in the art of brokerage services to place limit orders and orders at the opening price. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to place an order that would not be executed until the next day which would be after a particular decision period.

As per claim 16 see the rationale for claim 10 as a parallel system claim to that method claim.

As per claim 21 see the rationale for claim 10 as a parallel computer readable medium claim to that method claim.

As per claim 22 see the rationale for claim 10 as a parallel system claim to that method claim.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

- Partial Execution (Wall Street Words copyright 2003) "Execution of less than the full amount of an order. An investor may place an order to buy 500 shares of GenCorp at \$15 or less and get a partial execution if the broker is able to buy only 300 shares at that price."
- All or None (AON) (Dictionary of Finance and Investment Terms 4th Edition copyright 1995) "Securities: buy or sell order marked to signify that no partial transaction is to be executed."

1. Examiner's Note: The Examiner has cited particular columns and line numbers in the references as applied to the claims for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the

Art Unit: 3694

responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

2. Any inquiry concerning this communication from the examiner should be directed to Scott S. Trotter, whose telephone number is 571-272-7366. The examiner can normally be reached on 8:30 AM – 5:00 PM, M-F.

3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell, can be reached on 571-272-6712.

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

5. The fax phone number for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 (Official Communications; including After Final
Communications labeled "BOX AF")

(571) 273-6705 (Draft Communications)

sst
1/23/2009

/James P Trammell/
Supervisory Patent Examiner, Art Unit 3694

Application/Control Number: 10/723,264
Art Unit: 3694

Page 10